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09/453,918	04/27/2000	Hwa Kyung Lee	Q58987	1307

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EXAMINER

LIN, KENNY S

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/453,918

Applicant(s)

LEE ET AL.

Examiner

Kenny Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 2-11 are presented for examination. Claim 1 is cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4, 8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al (hereinafter Kotola), US Patent 6,321,257, in view of Kraft et al (hereinafter Kraft), US Patent 6,487,424.

4. Kotoal and Kraft were cited in the last office action.

5. As per claim 4, Kotola taught the invention substantially as claimed in claim 4 including a method for executing an object in a wireless internet access terminal, comprising the steps of:

- a. Interpreting data inputted through the internet and displaying the inputted data on a screen (col.2, lines 32-37, col.3, lines 59-65); and
- a. each of plural objects displayed on a screen linked to predetermined resource access location information (col.3, lines 24-32).

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6. Kotola did not specifically teach to focus any one of plural objects and to display plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen and executing an execution item displayed on the present screen by inputs from a button. Kraft taught a data entry method to focusing any one of plural objects (fig. 6) and to display plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen (abstract) and executing an execution item displayed on the present screen by inputs from a button (fig. 6, col.1, lines 52-59, col.2, lines 28-41, col.3, lines 35-40, col.12, lines 63-65). One would have been motivated to adapt Kraft's teaching of displaying plural execution items to implement said calculator functions in their mobile phone systems using such displaying and item focus method (col.12, lines 28-67). One would have also been motivated to use Kraft's displaying method since it supports complex signs displaying that includes said Chinese characters or so on (col.3, lines 11-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola and Kraft because Kraft's teaching of displaying plural execution items sequentially one by one provides an organized screen display and allows user to easily view and pick the desire objects which includes complex signs or characters.

7. As per claim 8, Kotola and Kraft taught the invention substantially as claimed in claim 4. Kotola further taught to include that wherein the execution items of an object include operations of updating a screen while navigating according to the resource access location information (col.7, lines 4-10); updating a screen for displaying the resource access location information

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(col.7, lines 10-18); and storing the resource access location information in a temporary storage unit to be immediately accessed in the necessity of a user (col.7, lines 19-28).

8. As per claim 10, Kotola and Kraft taught the invention substantially as claimed in claim 4. Kraft further taught to sequentially display the execution item one by one on the screen (fig. 6, col.1, lines 52-59, col.2, lines 28-41, col.3, lines 35-40, col.12, lines 63-65) and that execution items are stored in a storage unit, and one execution item is read from the storage unit by an input from the button to be displayed on one screen, so that plural execution items are sequentially displayed on the screen one by one (fig.5). Kotola and Kraft did not specifically teach that the execution items including “get”, “information view”, “bookmark”, and “cancel” are sequentially stored in a storage unit. However, storing execution items in sequence in a storage unit sequentially is well known in the art. One of ordinary skill in the art would have noticed that such storage method could be programmed using a circular link list structure. Furthermore, it is a design choice for the maker of the invention to provide different execution items as needed to execute the desired commands. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and sequentially storing the execution items and displaying by an input.

9. As per claim 11, Kotola and Kraft taught the invention substantially as claimed in claim 10. Kotola further taught to use a database as a storage unit (col.7, lines 23-28). Kotola and Kraft did not specifically teach that storage unit is a flash memory. However, it is well known in the art that use a flash memory as either the memory for a device or a hard drive. It would have

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been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola and Kraft and use a flash memory as a storage unit similar to how many digital cameras function for the Kotola and Kraft's apparatus as design choice.

10. Claims 2-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al (hereinafter Kotola), US Patent 6,321,257, in view of Kraft et al (hereinafter Kraft), US Patent 6,487,424, and Tuoriniemi et al (hereinafter Tuoriniemi), US 6,470,197.

11. As per claim 2, Kotola taught the invention substantially as claimed including a method for executing an object in a wireless internet access terminal, comprising steps of:

- b. interpreting data inputted through the internet and display the inputted data (col.2, lines 32-37, col.3, lines 59-65); and
- a. each of plural objects displayed on a screen linked to predetermined resource access location information (col.3, lines 24-32).

12. Kotola did not specifically teach to focus any one of plural objects and to select and execute any one of various execution items of the focused object according to an input state of a single button. Kraft taught a data entry method to focusing any one of plural objects (fig. 6) and to select and execute any one of various execution items of the focused object according to an input state of a single button (col.1, lines 31-37, 52-59, col.12, lines 50-54, 63-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola and Kraft because Kraft's teaching of displaying and

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highlighting the objects, selecting and executing the highlighted object according the input state of a single button eliminates the needs of using or having multiple buttons for selection on the mobile device and can reduce the size of the mobile device such as a cellular phone.

13. Kotola and Kraft did not specifically teach that the input state of the button include a short time period input, a long time period input, and a twice consecutive input. However, it is well known that a button can support different input states. For example, the left button of a computer mouse is provided with three different input state: 1) a short click highlights an object, 2) double click executes or opens an object, and 3) press and hold the button allows mouse to select more than one objects. Another example is the power button of a Palm pilot which is given two different input state: 1) short time period input turns on the device and 2) long time period input turns on the back light to night viewing. Any computer or palm pilot user would have easily acknowledged that a button can be implemented to support multiple input states. Furthermore, Tuoriniemi taught to use a single button with different input states to send commands to a headset control system used with a cellular phone (col.3, lines 47-48, col.4, lines 46-59, col.5, lines 20-29, col.6, lines 50-57, fig.6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Tuoriniemi because Tuoriniemi's teaching of providing three or more different input state to a single button reduce the number of unnecessary buttons on Kotola and Kraft's apparatus.

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14. As per claims 3, Kotola, Kraft and Tuoriniemi taught the invention substantially as claimed in claim 2. Kotola further taught to include that wherein the execution items of an object include operations of updating a screen while navigating according to the resource access location information (col.7, lines 4-10); updating a screen for displaying the resource access location information (col.7, lines 10-18); and storing the resource access location information in a temporary storage unit to be immediately accessed in the necessity of a user (col.7, lines 19-28).

15. As per claim 9, Kotola and Kraft taught the invention substantially as claimed in claim 4. Kotola further taught that a screen is updated while navigating according to the resource access location information (col.7, lines 4-10). Kotola and Kraft did not teach that the screen is updated if the input from the button lasts for less than a certain time period. However, it is design choice for one of ordinary skill in the art to select any type of inputs and sign it to use for displaying the plural execution items of the focuses object or execute the displayed item. Microsoft Windows allows users to change the button assignments to suit user preferences. Furthermore, Tuoriniemi taught to use a single button with different input states to send commands to a headset control system used with a cellular phone (col.3, lines 47-48, col.4, lines 46-59, col.5, lines 20-29, col.6, lines 50-57, fig.6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Tuoriniemi because Tuoriniemi's teaching of providing three or more different input state to a single button reduce the number of unnecessary buttons on Kotola and Kraft's apparatus.

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16. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al (hereinafter Kotola), US Patent 6,321,257, and Kraft et al (hereinafter Kraft), US Patent 6,487,424, as applied to claims 1-4 and 8-11 above, and further in view of Mitchell et al (hereinafter Mitchell), US Patent 5,966,671.

17. Mitchell was cited in the last office action.

18. As per claim 5, Kotola and Kraft taught the invention substantially as claimed in claim 4. Kotola and Kraft did not specifically teach that the inputs from the button to include an input lasting for more than a certain time period and a stop of the input. However, it is well known in the art to use a long pause input and a stop of the input. Such example can be found in a Palm pilot's power button. One can press and hold the power button for a certain time period to turn on the back light for the screen and also use the same button to turn off the light. Mitchell taught a mobile phone system to include a smart button uses a long press and a short press as different inputs (col.4, lines 36-38, 42-48, 55-56, 59-62) that enables one-hand operation (col.1, lines 66-67b col.2, lines 2-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Mitchell because Mitchell's teaching of using long press and short press for a button enables the buttons on Kotola and Kraft's apparatus to control more functions using only one hand.

19. As per claim 6, Kotola, Kraft and Mitchell taught the invention substantially as claimed in claims 4-5. Kotola, Kraft and Mitchell did not specifically teach that the plural execution on

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times are sequentially displayed if the input from the button lasts for more than a certain time period, and an execution item displayed on the present screen is executed if the input is stopped. However, it is design choice for one of ordinary skill in the art to select any type of inputs and sign it to use for displaying the plural execution items of the focuses object or execute the displayed item. Mitchell taught to use the long press to initial or end a call (col.5, lines 57-60, col.6, lines 12-16). Microsoft Windows allows users to change the button assignments to suit user preferences. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft, Mitchell and further assign different inputs to execute different commands in Kotola, Kraft and Mitchell's apparatus according to design choices.

20. As per claim 7, Kotola, Kraft and Mitchell taught the invention substantially as claimed in claim 6 including displaying a first item of a menu on the screen if the input last for more than a certain time period and executing an execution item displayed on the present screen if the lasting input is stopped (see claims 5-6 rejection). Mitchell further taught to judge if the certain time period elapses; judge if the input still lasts in case the certain time period elapsed; and judge if the item displayed on the present screen is the last one in case that the input still lasts (col.6, lines 44-51).

21. Kotola, Kraft and Mitchell did not specifically teach the steps of:

- c. Branching to the time period elapse judgment step after displaying a next item on the screen if the item is not the last one; and

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- d. Branching to the first item display step after displaying a “cancel” time if the item is the last one.

However, it is well known in the art to provide the same features for different windows. For example, each different window in Windows environment is give the function of close, minimize, maximize, size and move even when the contents displayed in the windows are different. It would have been obvious to one of ordinary skill in the art to provide judgment step for a next item on the screen so to determine whether the time period elapsed or not. Furthermore, it is obvious to loop the options back to the first one when the option display reaches the last one so the display of the options can be continuously. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Mitchell and circularly loop the options so to continuously display the options.

Response to Arguments

22. Applicant's arguments filed 6/11/03, regarding claim 1-11, have been fully considered but they are not persuasive.

23. In the remark, the applicant argued that (1) Kotola and Kraft do not teach the limitation of original claim 2 of the input states of the single button including a short time period input, a long time period input, and a twice consecutive input. (2) Nothing in the cited area corresponds to the limitation of updating a screen while navigating according to resource access location information. (3) No suggestion or motivation within Kotola or Kraft to combine the references in rejecting claim 4. (4) The general comments in the Office Action and the references do not

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teach or suggest the specification limitation of claim 10. (5) Claims 5-9 and 11 are allowable since they are depending on claim 2. (6) No motivation or suggestion to combine the reference for claim 5.

24. Examiner respectfully traverse the argument:

As to point (1), examiner has combined a new reference to show that different input states is well known in the art and can be implemented to a button. (see claim 2 rejection)

As to point (2), the cited area pointed out the limitation of updating a screen navigating (accessing WWW automatically updates a screen) according to resource access location information (URL) by entering the URL to request for Internet information.

As to point (3), Kraft taught a data entry method to focusing any one of plural objects (fig. 6) and to display plural execution items sequentially one by one by displaying one of the plural execution items of the focused object on one screen (abstract) and executing an execution item displayed on the present screen by inputs from a button (fig. 6, col.1, lines 52-59, col.2, lines 28-41, col.3, lines 35-40, col.12, lines 63-65). One would have been motivated to adapt Kraft's teaching of displaying plural execution items to implement said calculator functions in their mobile phone systems using such displaying and item focus method (col.12, lines 28-67). One would have also been motivated to use Kraft's displaying method since it supports complex signs displaying that includes said Chinese characters or so on (col.3, lines 11-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola and Kraft because Kraft's teaching of displaying plural execution items

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sequentially one by one provides an organized screen display and allows user to easily view and pick the desire objects which includes complex signs or characters.

As to point (4), providing execution items is common. It is a design choice for the maker of the invention to provide different execution items such as “edit”, “save”, “cancel”, “delete” as needed to execute the desired commands (see claim 10 rejection).

As to point (5), claims 5-9 and 11 are depending on claim 4 instead of claim 2. Claims 4-9 and 11 are not amended in the condition of allowance, therefore the rejections remains.

As to point (6), Mitchell taught a mobile phone system to include a smart button uses a long press and a short press as different inputs (col.4, lines 36-38, 42-48, 55-56, 59-62) that enables one-hand operation (col.1, lines 66-67b col.2, lines 2-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kotola, Kraft and Mitchell because Mitchell’s teaching of using long press and short press for a button enables the buttons on Kotola and Kraft’s apparatus to control more functions using only one hand

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bieback et al, US 6,121,881, disclosed input states for a button.

Smethers, US 6,560,640, disclosed input states of a button for bookmarking.

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26. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (703)305-0438. The examiner can normally be reached on 8 AM to 5 PM Tuesday to Friday and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. Additionally, the fax numbers for Group 2100 are as follows:

Official Responses: (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-6121.

ksl
August 20, 2003

LARRY D. DONAGHUE
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to be 'L. Donaghue', written over the printed name and title.